PhD position in functional biodiversity research

As part of the DFG project, Above- and belowground phenological complementarity as drivers of biodiversity-ecosystem functioning relationships, the chair of Geobotany at the University of Freiburg invites for applications for a PhD-position focusing on tree diversity, canopy development and nutrient uptake.



The project: High biodiversity often results in enhanced ecosystem functioning. Although positive diversity effects have been reported for forest ecosystems the mechanistic understanding of biodiversity ecosystem functioning relationships is rather poor in these long lived systems. Our study aims at investigating whether temporal complementarity enhances the nutrient uptake in species rich forest stands compared to monospecific stands. The study will take place at two experimental sites of the International Diversity Experiment Network with Trees (IDENT, http://www.treedivnet.ugent.be/ExpIDENT.html), which is part of the global network of tree biodiversity experiments, TreeDivNet. Field data collection will primarily be in Freiburg, Germany and a subset of measurements will be collected at a related site (Sault-Ste-Marie) Canada. We will study the phenology of leaf expansion and abscission, and leaf area index combined with the phenology of nutrient uptake, nutrient status and foliage nutrient content along gradients of tree functional diversity and species richness.

The candidate should have:

- A strong background in plant ecology, forest ecology or biodiversity research
- A strong interest in biodiversity research
- A high degree of motivation and enthusiasm for field work
- The ability to work independently and as part of an international team
- Excellent communication and organization skills
- The willingness to lead field campaigns and supervise field assistants
- Highly developed English communication skills (written, verbal)
- A driving license
- Preferred: a strong statistical background and knowledge of R
- Preferred: a demonstrated ability to successfully carry out relevant research, including the analysis of data and written communication of results

The position: The salary is TV-L E13 65% for a period of 33 months. It is possible to start as soon as possible but preferably not later than July 1, 2018. The University of Freiburg is an equal opportunity employer and encourages women to apply. For international candidates, the University of Freiburg offers support through the Welcome Service (http://www.welcomecenter.uni-freiburg.de/front-page-en?set_language=en).

Besides a strong focus on functional biodiversity research, the Geobotany working group is addressing questions related to global change ecology, functional plant ecology and plant ecophysiology. Founded in 1457, the University of Freiburg is one of the oldest German universities. Freiburg is a vibrant student city at the foot of the Black Forest in close vicinity to France and Switzerland, with a rich cultural and academic life and excellent recreational opportunities. You will be working with a strong international team of researchers from both Germany and Canada (Jürgen Bauhus, Christian Messier, Charles Nock, Alain Paquette, Bill Parker and Michael Scherer-Lorenzen).

Your application will consist of a letter of motivation, an English summary of your most recent thesis/manuscript (max. 300 words), a CV, relevant certificates (MSc., BSc., Diploma etc.), and contact details of two academic references. Please send your application as a single PDF by email with the subject "PhD position Phenology" to Laura Rose (<u>laura.rose@biologie.uni-freiburg.de</u>). We will start to review applications on May 15th and continue until the position is filled.